

December 21, 2015

VIA ELECTRONIC MAIL

Ms. Amber Whisnant
Environmental Scientist
U.S. Environmental Protection Agency
Chemical Risk Information Branch
Air & Waste Management Division
11201 Renner Boulevard
Lenexa, KS 66219

Re: CRNF Plant RMP Inspection, December 7-11, 2015

Dear Ms. Whisnant,

CRNF is sending this letter in response to the Preliminary Findings as a result of the inspection performed at our facility by yourself, George Hess, Jim Ford, Dave Browning on December 7-11, 2015. EPA's request gave CRNF 10 days to complete this response which necessitated a quick review. Therefore, this response reflects the information available as of the date of this letter. We would like you to consider this additional information as you complete the final inspection report.

EPA Preliminary Findings and CRNF Responses

- 1) 40CFR 68.36 – Failure to review and update the offsite consequence analyses at least once every five years. Document 5 a-e - population estimates and document any environmental receptors.**

CRNF Response:

There are two regulatory criteria that trigger an update of the off-site consequence analysis. Neither of these two criteria has been triggered since 2011.

68.36(a) The owner or operator shall review and update the offsite consequence analyses at least once every five years.

68.36(b) If changes in processes, quantities stored or handled, or any other aspect of the stationary source might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more, the owner or operator shall complete a revised analysis within six months of the change and submit a revised risk management plan as provided in §68.190.

A) Population Estimates

The 2011 RMP submission used the most current census data, which was 2000, because the 2010 census with block information for urban and rural was not yet released. The update in 2013 was due to an additional covered process but not a change in the worst case or alternate scenario or the off-site consequences.

In 2016, the RMP will be update per 68.36 (a), at which time the most current census data will be used.

B) Environmental Receptors are not present in the 2.9 mile endpoint distance.

There are no environmental receptors in the 2.9 mile endpoint distance and none are included in the RMP submittal.

2) 68.65 (a) Failure to compile current written process safety information.

A) Doc 14b pages 13, 15, 17, 20, 22, 24, 27, 33, 35, 37, 40, 42, 44 lists diagram D12-0904A, the updated drawing is D01-0002A. Newer diagram is D01-0002A.

CNRF Response:

68.65(a) In accordance with the schedule set forth in §68.67, the owner or operator shall complete a compilation of written process safety information before conducting any process hazard analysis required by the rule. The compilation of written process safety information is to enable the owner or operator and the employees involved in operating the process to identify and understand the hazards posed by those processes involving regulated substances. This process safety information shall include information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process.

CRNF drawing # D12-0904A is 100% accurate in depicting the electrical classification for all six of the RMP covered processes, and enabled CRNF as the owner or operator and the employees involved in operating the process the information necessary to identify and understand the hazards posed by those processes.

D01-0002A was a project drawing for a utilities project, which is a non RMP covered process, and the correct electrical classification drawing is D12-0904A.

B) Document #26 RAGAGEP certification does not include API 510 & API 653 (from Doc 17 MI page 7).

CRNF compiled written process safety information before conducting PHAs on its covered processes in accordance with 40 CFR 68.65(a) and the equipment at the CRNF Plant was designed, engineered, constructed and installed in accordance with the applicable codes, standards and Industrial practices required for the safe and proper operation of the facility. The CRNF document #26 that was provided demonstrates compliance for 68.65 (d)(1)(vi) – “Information pertaining to the equipment in the process shall include design codes and standards

employed.” API 510 and API 653 are standards for inspections for 68.73, not design and construction as PSI under 68.65.

3) 68.65 (d) (2) Failure to comply with RAGAGEP - ANSI K61.1 Ammonia Piping label or color code section 5.4.3, bullets signage "inhalation hazard" section 6.6.2

A) Doc 26 - barriers section 6.7.1

CRNF Response:

40 CFR 68.65 (d)(2) Information pertaining to the equipment in the process.

(2) The owner or operator shall document that equipment complies with recognized and generally accepted good engineering practices.

40 CFR 68.65(d)(2) requires that CRNF prior to conducting a PHA, compile certain information including, information pertaining to equipment in the process. CRNF is required to “document”, prior to conducting the PHA, that equipment in the process complies with recognized and generally accepted good engineering practices. 40 CFR 68.65(d)(2) does not require CRNF to comply with RAGAGEP or any particular ANSI or CGA standard and CRNF, as a matter of law, cannot have “fail[ed] to comply with RAGAGEP – ANSI K61.1”

ANSI K61.1 – 6.7.1 Container appurtenances shall be located or protected by suitable barriers so as to avoid damage by trucks or other vehicles. Main container shut-off valves shall be kept closed and locked when the installation is unattended. If the facility is protected against tampering by fencing, or other suitable means, valve locks are not required. Suitable barriers may include, but are not limited to; concrete/steel posts (minimum 4” diameter pipe, 3 feet above ground, 3 feet below ground, set 4 feet apart) guardrails, concrete road barriers, vehicle warning devices or other barriers providing protection.

CGA G2.1 - 6.7.1 Containers and appurtenances shall be located or protected by suitable barriers to avoid damage by trucks or other vehicles.

Barriers are not equipment in the process. The ammonia bullets are equipment in the process and they do comply with generally accepted good engineering practices, which was documented by CRNF prior to conducting the PHA as required by 40 CFR 68.65(d)(2).

Notwithstanding the above, concrete barriers have been placed on the south side of the bullets to provide protection and to avoid damage by trucks or other vehicles.

B) Ammonia Piping label or color code section 5.4.3

CRNF Response:

40 CFR 68.65(d)(2) requires that CRNF prior to conducting a PHA, compile certain information including, information pertaining to equipment in the process. CRNF is required to “document”, prior to conducting the PHA that equipment in the process complies with recognized and generally accepted good engineering practices. 40 CFR 68.65(d)(2) does not require CRNF to comply with RAGAGEP or any particular ANSI or CGA standard and CRNF, as a matter of law, cannot have “fail[ed] to comply with RAGAGEP – ANSI K61.1”

ANSI K61.1– 5.4 - Markings of non-refrigerated containers and systems other DOT containers. 5.4.3 – All container openings except for pressure relief valves, pressure indicating devices, thermometer wells, or liquid level indicators shall be marked, stenciled, tagged, or decaled to indicate whether the opening is in contact with the liquid or vapor phase when the container is filled to the maximum allowable filling density.

CGA G2.1 - 5.4.3 - Storage tanks without dataplates -ASME storage tanks without legible dataplates may have their dataplates replaced by the manufacturer in full accordance with the NBIC (Code of construction=ASME Code).

The CRNF pressurized ammonia bullets are contained within the process and do not have container openings other than exempted PSV's. Therefore, even if 40 CFR 68.65(d)(2) required compliance with RAGAGEP and the ANSI and CGA standards referenced by EPA, labels or color coding would not be required.

C) Bullets signage "inhalation hazard" section 6.6.2.

CRNF Response:

40 CFR 68.65(d)(2) requires that CRNF prior to conducting a PHA, compile certain information including, information pertaining to equipment in the process. CRNF is required to "document", prior to conducting the PHA, that equipment in the process complies with recognized and generally accepted good engineering practices. 40 CFR 68.65(d)(2) does not require CRNF to comply with RAGAGEP or any particular ANSI or CGA standard and CRNF, as a matter of law, cannot have "fail[ed] to comply with RAGAGEP – ANSI K61.1"

ANSI K61.1 – 6.6.1- Each container or group of containers shall be marked on at least two sides, which are visible with the words, ANHYDROUS AMMONIA-in sharply contrasting colors with letters not less than 3.9 inches (100 mm) high. Each container or group of containers shall be marked on at least two sides, which are visible with the words, INHALATION HAZARD, in sharply contracting colors with letters not less than 2 inches high.

6.6.2 - Each container or group of containers shall be conspicuously marked with a hazard warning label complying with 29 CFR 1910.1200

CGA G2.1 - 6.6.1 -Each container or group of containers shall be marked on at least two sides, which are visible with the words, ANHYDROUS AMMONIA, or CAUTION—AMMONIA, in sharply contrasting colors with letters not less than 3.9 in (100 mm) high.

6.6.2 Each container or group of containers shall be conspicuously marked with a hazard warning label complying with 29 CFR 1910.1200 [12].

The requirement for bullet signage "Inhalation Hazard" which was referenced in the ANSI K61.1 Standard 6.6.1, is no longer applicable in the updated ANSI/CGA G2.1 -2014 Standard. Therefore, even if 40 CFR 68.65(d)(2) required compliance with RAGAGEP and ANSI/CGA standards for worker safety, ANSI K61.1 section 6.6.2 requires compliance with the OSHA 29CFR1910.1200 Regulation for Hazard Communication. CRNF's bullets contain the NFPA 704 label as pictured in the on-site tour picture #SS853221.

- 4) 68.73 (d) (3) Failure to perform inspections and tests on process equipment consistent with manufacturer's recommendations and good engineering practices. Doc 36 PSV Test Frequency Chart - valves 6 years.**

CRNF Response:

40 CFR 68.73(d) Inspection and testing. (1) Inspections and tests shall be performed on process equipment.

(3) The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience.

The CRNF mechanical integrity program references API 510 for vessel and relief valve inspections. This is widely known as a recognized and generally accepted good engineering practice maintenance and inspections. The facility chose this standard for that reason. ANSI regulations are not considered to be as rigorous in technical content as API or ASME. In fact, Part 68.3 Definitions lists API and ASME, but makes no mention of ANSI.

5) 68.79 (b) Failure to have at least 1 person knowledgeable in the process conduct the January 2014 Compliance Audit. Doc 001.

CRNF Response:

The CRNF Compliance Audit was conducted by third party contractor and a team of CRNF affiliate employees, knowledgeable in the process and audit elements. The third party contractor along with the Corporate based employee have been an integral part of the participation, review, and validation of the CRNF PHA, MOC and incident investigation processes. Each audit team member has over 20 years of experience and specialized skills including engineering, mechanical integrity, emergency response, operations, training, process safety, safety, process safety management, and risk management plans with various certification, including registered professional engineer. Professional certifications of the team leader include: registered professional engineer, certified professional environmental auditor, and certified professional process safety management auditor.

The Process Safety Management department provided assistance in obtaining records for review, scheduling personnel for discussions and records review, and escorting auditors to field locations for observations. All facility department managers and technical staff were participants in the audit process. In all, discussions were held with over 23 individuals ranging from contractors, operators, examiners, engineers, maintenance personnel, and supervisors and field observations which were made in process areas.

6) 68.81 (f) Failure to review investigation findings with contractors - 6/5/14 Incident. Doc 3a

CRNF reviewed the report with "affected personnel whose job tasks are relevant to the incident findings, including contract employees as applicable." CRNF was not required to review the report with the "affected contractors" because their job tasks were not relevant to the incident findings, specifically, the design and pressure rating of the valve, process, and socket weld thickness measurements.

CRNF reviewed the report findings with the welding contractor that installed the valves involved in the incident. The NDT records showed that the weld was done properly and the hydro test

passed. CRNF advised the welding contractor of the analysis and requested that any thin socket be identified to plant management.

CRNF was not required to review the report findings with the two contractors who were indirectly injured as a result of the incident, because their job tasks are not relevant to the incident findings. The Mid-States contractors were tagging steam traps, a task that is not relevant to the incident findings. The contracting company was advised, post incident, on what CRNF was investigating.

7) 68.87 (c) (3) Failure to require the contractor to document employee I.D., date of training, and means to verify training was understood.

CRNF Response:

40 CFR 68.87 Contractors

(a) Application. This section applies to contractors performing maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a covered process. It does not apply to contractors providing incidental services which do not influence process safety, such as janitorial work, food and drink services, laundry, delivery or other supply services.

(b) Owner or operator responsibilities. (1) The owner or operator, when selecting a contractor, shall obtain and evaluate information regarding the contract owner or operator's safety performance and programs.

(2) The owner or operator shall inform contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.

(3) The owner or operator shall explain to the contract owner or operator the applicable provisions of subpart E of this part.

(4) The owner or operator shall develop and implement safe work practices consistent with §68.69(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in covered process areas.

(5) The owner or operator shall periodically evaluate the performance of the contract owner or operator in fulfilling their obligations as specified in paragraph (c) of this section.

(c) Contract owner or operator responsibilities. (1) The contract owner or operator shall assure that each contract employee is trained in the work practices necessary to safely perform his/her job.

(2) The contract owner or operator shall assure that each contract employee is instructed in the known potential fire, explosion, or toxic release hazards related to his/her job and the process, and the applicable provisions of the emergency action plan.

(3) The contract owner or operator shall document that each contract employee has received and understood the training required by this section. The contract owner or operator shall prepare a record which contains the identity of the contract employee, the date of training, and the means used to verify that the employee understood the training.

(4) The contract owner or operator shall assure that each contract employee follows the safety rules of the stationary source including the safe work practices required by §68.69(d).

(5) The contract owner or operator shall advise the owner or operator of any unique hazards presented by the contract owner or operator's work, or of any hazards found by the contract owner or operator's work.

The CRNF Contractor Safety Exhibits and Procedures Manual address this requirement in multiple sections of the procedure. It outlines the requirements in the Contractor Entry Requirements and all prospective contractors must complete and submit a Pre-Qualification Form

(PQF) to evaluate safety performance and programs. The EPA obtained two signed PQF examples during the Inspection providing evidence that CRNF had evaluated the contract companies programs.

CRNF began implementation in 2014 of a third party service (ISNetwork) to enhance contractor safety management, including documentation and rating of the prequalification criteria set forth for contract companies. The service will review and verify that the health, safety, and environmental programs submitted by the contractor companies and ensure compliance with regulatory and CRNF standards.

Since the RMP inspection CRNF has obtained additional training records and verified that the contractual and regulatory requirements are met.

- 8) **68.95 (a) (1) (ii) Failure to include documentation of proper first aid and emergency medical treatment necessary to treat accidental human exposures in the emergency response plan.**

CRNF Response:

40 CFR 68.95 (a)(1)(ii) *The owner or operator shall develop and implement an emergency response program for the purpose of protecting public health and the environment. Such program shall include the following elements:*

(1) An emergency response plan, which shall be maintained at the stationary source and contain at least the following elements:

(ii) Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures;

CRNF's emergency response plan complies with the requirements of 68.95(a)(1), including documentation of proper first-aid and emergency medical treatment. The current Emergency Response Plan section 5d - First Aid, contains both an emergency care and first aid procedure and indicates that specific chemical first aid procedures are available in the First Aid Station. The facility has a Licensed Health Care Professional on staff and provided the ammonia first aid procedures for consideration during the inspection. The EPA Inspectors also reviewed the CRNF Safety Data Sheet which identifies ammonia emergency care and response. The Facility trains annually with the local area emergency responders including an ammonia emergency scenario. CRNF does not believe this to be a noncompliance for RMP yet has enhanced the Emergency Response Plan document to include the specific emergency care and treatment for Ammonia as in the associated procedures and training.

Please contact Ron McGill at rfmcgill@cvrenergy.com if you have any questions.

Sincerely,



Neal E. Barkley, P.E.
Vice President & Fertilizer Facility Manager